CLAIMS:

1. An electric device (1, 100) with a body (2, 102) having:

- a resistor (7, 107) comprising a phase change material being changeable between a first phase and a second phase, the resistor (7, 107) having a first electrical resistance when the phase change material is in the first phase and a second electrical resistance, different from the first electrical resistance, when the phase change material is in the second phase, and

- a heating element (6, 106) being able to conduct a current for enabling a transition from the first phase to the second phase, the heating element (6, 106) being arranged in parallel with the resistor (7, 107).

2. An electric device (1) as claimed in claim 1, wherein the heating element (6) has a heating element electrical resistance which is smaller than the maximum of the first electrical resistance and the second electrical resistance.

3. An electric device (1) as claimed in claim 2, wherein the heating element's electrical resistance is larger than 0.3 times the minimum of the first electrical resistance and the second electrical resistance.

4. An electric device (1, 100) as claimed in claim 1, wherein the heating element (6, 106) and the resistor (7, 107) are in direct contact.

5. An electric device (100) as claimed in claim 1, 2, 3 or 4, wherein the phase change material constitutes a conductive path between a first contact area and a second contact area, a cross-section of the conductive path being smaller than the first contact area and the second contact area.

6. An electric device (100) as claimed in Claim 5, wherein a part of the conductive path having said cross-section constitutes a volume of phase change material, the volume having an electrical resistance which is smaller than an electrical contact resistance at

the first contact area and/or at the second contact area, independent of whether the phase change material is in the first phase or the second phase.

7. An electric device (1, 100) as claimed in Claim 1, wherein the heating element material is of a composition $X_{100-(t+s)}Si_sY_t$, where t and s denote atomic percentages satisfying $t<0.7$ and $s+t>0.3$, X comprises one or more elements selected from Ti and Ta, and Y comprises one or more elements selected from C and N.

8. An electric device (1, 100) as claimed in Claim 7, wherein X is substantially free from Ti.

9. An electric device (1, 100) as claimed in Claim 7, wherein s is smaller than or equal to 0.7.

10. An electric device (1, 100) as claimed in Claim 7, wherein Y comprises N.

11. An electric device (100) as claimed in Claim 1, wherein the resistor constitutes a memory element, and the body (102) comprises:

- an array of memory cells, each memory cell comprising a respective memory element and a respective selection device (171), and
- a grid of selection lines (120, 121),

each memory cell being individually accessible via the respective selection lines (120, 121) connected to the respective selection device (170).

12. An electric device (100) as claimed in Claim 11, wherein:

- the selection device (171) comprises a metal oxide semiconductor field effect transistor having a source region (172), a drain region (173) and a gate region (174), and
- the grid of selection lines (120, 121) comprises N first selection lines (120), M second selection lines (121), and an output line,

the resistor (170) of each memory element electrically connecting a first region selected from the source region (172) and the drain region (173) of the corresponding metal oxide semiconductor field effect transistor to the output line, a second region of the corresponding metal oxide semiconductor field effect transistor selected from the source region (172) and the drain region (173) and being free from contact with the first region,

being electrically connected to one of the N first selection lines (120), the gate region (174) being electrically connected to one of the M second selection lines (121).